

Title (en)

METHOD OF DETERMINING CORRECTED GEOMETRIES OF PROJECTION IMAGES

Title (de)

VERFAHREN ZUR ERMITTlung VON KORRIGIERTEN AUFNAHMEGEOMETRIEN VON PROJEKTIONSBILDERN

Title (fr)

PROCÉDÉ DE DÉTERMINATION DE GÉOMÉTRIES D'IMAGES CORRIGÉES D'IMAGES DE PROJECTION

Publication

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Application

EP 19161295 A 20190307

Priority

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Abstract (en)

[origin: US2020286264A1] A method is provided for determining corrected acquisition geometries of projection images. The method includes providing a projection image dataset that has a plurality of projection images of an object under examination acquired by an acquisition device in different acquisition geometries. The method further includes determining a provisional acquisition geometry for each of the projection images by a first optimization method by minimizing a first cost function by varying the provisional acquisition geometry, wherein the first cost function is contingent on a plurality of consistency measures determined based on the provisional acquisition geometry for a respective pair of projection images. The method further includes determining the respective corrected acquisition geometry for each of the projection images by a second optimization method by minimizing a second cost function by varying the corrected acquisition geometries, wherein the second cost function is contingent on a measure for an image quality of image data reconstructed based on the projection images and the corrected acquisition geometries, and wherein, in a first iteration act of the second optimization method, the provisional acquisition geometries determined by the first optimization method are used as corrected acquisition geometries.

IPC 8 full level

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CPC (source: CN EP US)

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G06T 2207/10116 (2013.01 - CN US); **G06T 2207/30168** (2013.01 - CN); **G06T 2211/424** (2013.01 - US)

Cited by

CN117297630A; US11494956B2; DE102022206561B3; US11998376B2

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